CONNECTIONS

A Virginia Local Emergency Planning Committee Newsletter

Spring/Summer 2001

Applying Technology to Hazardous Materials Planning

By John Medici

Hazardous Materials Coordinator, Prince William County

Digital technology currently available to collect, store, manipulate and communicate information can be applied to support local hazardous materials programs to enhance planning, response and remediation. The application of digital technology to hazardous materials planning provides an opportunity to integrate text, detailed graphics and photographs (all of which can be in color) into one document. In addition to the classic print version, the

document may now be stored and distributed on various types of electronic media. Access to the plan becomes virtually unlimited and, in the long run, maintaining, modifying and distributing updates to the plan become

no more difficult than updating a file.

In Prince William County, we have recently achieved a long-standing goal of being able to produce, distribute and access the Hazardous Materials Emergency Response Plan (HMERP) electronically. The results of this effort have exceeded expectations. The revised plan is a much more useful document than the old plan, particularly because of the improved graphics and

maps in color. Changes to the plan and updates can be made in a more responsive and effective manner with considerable savings in administrative time and expense. The plan is now available





on CDs and on the Prince William County Government Web page, as well as in the traditional print version. The plan is available to anyone with access to the internet, at any time. A request for a

copy of the plan can be satisfied by the requestor downloading a copy from the Web page, or a CD of the most current version of the plan can be burned and mailed at a fraction of the cost of processing a printed copy.

Several objectives guided the effort towards preparing an electronic HMERP.

First of all, a program had to be (CONTINUED ON PAGE 2)

"CHER-CAP"

Another Tool in Building a Disaster-Resistant Community

By Hui-Shan L. Walker and Mark F. Junghans

Deputy Coordinator Emergency Management and Emergency Management Planner, Chesapeake

On August 15, 2001 the City of Chesapeake, partnering with surrounding communities in the Hampton Roads region, will conduct a full-scale exercise in the Federal Emergency Management Agency's (FEMA) Comprehensive HAZMAT **Emergency Response-Capability** Assessment Program (CHER-CAP). Through participation in the CHER-CAP, the Hampton Roads community will assess its emergency response procedures in the event of a hazardous materials incident on the railways with a terrorism component that includes mass casualties and fatalities.

The Hampton Roads region consists of 16 local jurisdictions with a total population of 1.5 million people. The Hampton Roads area is also home to a myriad of United States military including Army, Navy, Marine Corps, Air Force and Coast Guard personnel. Besides the large number of military, the area is renowned for its major shipbuilding industry and many seaports.

CHER-CAP utilizes the skills and resources of local, state and federal governments and the private industry (CONTINUED ON PAGE 4)

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developed around the existing
plan that would optimize
available hardware, software and
local talent. An objective of the
program was to ensure that
maintaining and changing the
plan would be facilitated in the
future. It was also deemed
essential to tailor the information
to best meet the needs and
capabilities of the people for
whom the plan was intended.

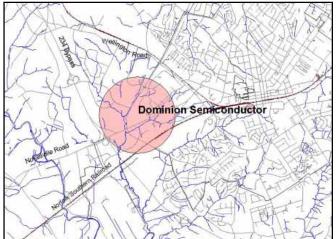
With all the objectives in mind, it was important to develop a program that was simple so that the user would not have to possess a degree in computer science in order to understand and operate the system. Simplicity was achieved by using the hardware, software and expertise at hand. Data manipulation, the creation of maps, aerial photographs and other graphics were done ahead of time. If the user could open a file, access to the electronic information was possible.

electronic information was possible.

Prince William County's initial
planning process had been completed a
decade ago. The first HMERP
was approved and published in
1990. A major effort to revise the
plan to incorporate digital
technology commenced in the
late 1990s. The effort was
facilitated when the county
adopted standard software for
word processing and improved
and expanded the county
Intranet. The original plan had
been typed in an outdated word

processing program that could not be readily converted into the new software. Consequently, the time was right to completely revamp and reformat the entire document.

While the text was in the process of being entered into the new software, digital mapping data was used to generate the facility maps with vulnerability zones. Although the digital maps were generated in a different software program, digital maps and digital photographs could be readily converted into a common format that can be



inserted into a word document.

The digital maps were inserted in the text and the plan was saved on a hard drive, zip drive, CD and the county Intranet. The entire file was converted and put on the county's Web site. Now copies of the HMERP can be produced at a fraction of the cost of printing or photocopying, and the CDs can be distributed along with or to replace printed copies. New requests for copies of the plan can be filled by sending



printed copies, CDs or Email attachments.

The file is available to anyone that has access to the Internet. Updating or changing the plan is now no more difficult than updating the file, the Web page, and then notifying those with copies of the plan that there have been changes. Of course, the notification is made via Email. Copy holders can then

either make pen and ink changes or download updated pages off the Web. The electronic version of the plan was first available in January 2000.

After getting the revised plan published and posted to the Web, maintaining the plan became the major undertaking. The review process is continuous and involves both informal as well as formal procedures. The informal procedure includes information received or gathered in the field as a result of a myriad of other activities. Fire inspections,

building permit requests, zoning applications and discussions at LEPC meetings are all sources of information regarding the status of hazardous materials facilities in the county.

The formal process begins with the receipt and review of Tier II Reports. The contents of annual submissions are compared with the information on file and in the plan. Any changes identified are noted and appropriate actions are taken. New sections are written and new

maps are prepared if required. Changes are now consolidated in an annual Record of Changes added to the plan and posted to the Web. Whether as a result of a formal or informal review, an urgent change quickly can be distributed electronically. While the Tier II data is reviewed and changes to the HMERP are being edited, digitized mapping data are also being reviewed and updated. A CD is produced that has all the pertinent mapping data as well as composite aerial photographs of SARA facilities and selected

target hazards. Again, the objective of simplicity is realized by providing the user a map file to be opened and viewed instead of having to generate the file.

A significant enhancement to the program was realized this year with the addition of digitized aerial photographs of the entire county coverage. The aerial photographs can be overlaid with the (CONTINUED ON PAGE 3)

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mapping data to produce graphics for planning, response, and remediation. Real time digital imaging sent from the scene and then forwarded to any agency that is accessible on the Internet is a tremendous asset. But that is a subject for a separate discussion.

Obviously, the more data elements added the greater the storage requirements. To allow for program growth, it was decided to keep the HMERP on one CD and to put the mapping files on a second CD that also contains the digitized aerial photographs of the SARA facilities. The total county aerial photographic coverage is contained on four CDs. The HAZMAT Officers carry CDs in order to be able to generate maps and aerial photographs if an incident occurs at a site other than the identified facilities. Generally, this type of requirement involves a transportation route.

All the elements brought together to produce the electronic plan were readily adaptable to field applications to support response and remediation. We currently have two vehicles equipped with laptops, inserts (aircards) that permit wireless internet access, 4 in 1 printers (printer, fax, scanner and copier), and power converters so we have two totally mobile setups. Either



vehicular package is completely portable and can be pulled out of the vehicle for use in a command vehicle, at a command post, or even in the emergency operations center (EOC).

We also have a third setup that is available from an office location if multiple sites are activated. All three setups have identical software, and all have the HMERP and mapping data loaded on the hard drive.

Software used by the county includes Microsoft Windows 95/98, Microsoft Office 97 and Arcview GIS. Hardware used includes standard PCs, Laptops, aircards, digital cameras and power converters for vehicle use. Upgrades were required for hard drive size and RAM in order to be able to process and store the graphics (mapping files and photographs).

While efforts were under way to finalize the plan and then do the

requisite conversions and copying for posting to the Web site, concurrent efforts were completed to put other Local Emergency Planning Committee (LEPC) information on the Web as well. To view the Prince William County electronic HMERP and obtain LEPC information, go to *pwcgov.org* and search for "lepc." Once the list appears, click on the item you would like to review.

Initial expectations have been exceeded markedly. Technology applied to the hazardous materials program is also being used for all other emergency response and disaster preparedness tasks. The applications are endless.

For additional information contact John Medici at <u>jmedici@pwcgov.org</u>, (703) 792-7405 or by FAX at (703) 792-6492.



Proposed LEPC Logo Open for Review

A committee was established earlier in the year to develop a logo that Virginia LEPCs could use to enhance their identity within the community as well as throughout the state. The committee was comprised of Nell Rose Jarvis, Fairfax County Joint LEPC; James E. Newsome, chairman, Goochland County LEPC; and George Roarty, VDEM. Nell Rose Jarvis and Ed Collins of the Fairfax County Joint LEPC were a tremendous help in providing the graphic support in developing the logo. The logo is designed so that it can be customized to reflect the name of each LEPC. Before we officially adopt this as the Virginia LEPC logo, we would like



to give everyone an opportunity to review and comment on it. Please forward your comments to: groarty@vdem.state.va.us.

Incident Reinforces Importance of LEPC Meetings

By Steven De Lisi

VDEM Area 2 Hazardous Materials Officer

On Monday, March 12, 2001, at 7:40 a.m., Steven De Lisi, Hazardous Materials Officer assigned to Area 2 for the Virginia Department of Emergency Management, received a request for assistance from the fire department at Richmond International Airport regarding a spill of two products at the airfreight terminal. These items were identified by their trade names and were consigned to Goldschmidt Chemicals in Hopewell. De Lisi attempted to gather information on any possible hazardous characteristics of the products. However, with only a trade name, research was difficult using the generic reference sources available to De Lisi in his onboard vehicle library.

De Lisi then attempted to contact Goldschmidt Chemicals. While the international telephone number found on the shipping papers would have provided the necessary information, De Lisi believed it would be quicker to contact the local facility directly. Furthermore, De Lisi had met Michael Pour, Safety Director for the Hopewell facility, while attending LEPC meetings in Hopewell and felt comfortable working with someone he knew personally.

In order to get the number for the Goldschmidt facility, De Lisi contacted the Hopewell Fire Department. After explaining the situation to Tim Webb, the on-duty Battalion Chief, Webb offered to go directly to the plant and pick up the necessary Material Safety Data Sheets (MSDS). After just a few minutes, Webb called back ready to fax

the information to the scene. He also provided De Lisi with the telephone number for Pour.

Pour was able to advise De Lisi on the hazards of the product, which were minimal. Pour provided an MSDS for each product and also suggested recommendations for local clean-up contractors who could help mitigate the spill.

While this incident posed only a minor threat to public safety and the environment, De Lisi believes that it underscores the benefits of establishing good working relationships with local industry and fire departments through regular attendance at LEPC meetings. Confidence and trust between those involved in a hazardous materials emergency are essential elements for success and LEPCs are an effective way to achieve this goal.

"CHER-CAP" Another Tool in Building a Disaster-Resistant Community continued

(CONTINUED FROM PAGE 1) to identify and address the local emergency preparedness and response capabilities of the Hampton Roads community. The City of Chesapeake's Local Emergency Planning Committee (LEPC) accepted the lead role in coordinating this exercise. However, this full-scale exercise would not be possible without the commitment and dedication of other surrounding Hampton Roads communities and other state and federal agencies.

CHER-CAP's primary focus is on the improvement of the community response to hazardous materials incidents. The City of Chesapeake and the Hampton Roads region have built upon the basic exercise concept of responding to a hazardous materials incident by develop-



ing a terrorism component that will have mass casualties and fatalities. This full-scale exercise will test the extent of regional interagency cooperation and the unified command structure with state and federal agencies responding to this exercise.

In addition to testing governmental

agencies' interactions in response to a terrorist incident involving hazardous materials, ten local community hospitals in the Hampton Roads region will test their individual capabilities during this exercise.

The Hampton Roads region looks at preparedness as a deterrent to hazardous materials incidents and acts of terrorism. CHER-CAP is another tool that provides a safe and realistic training environment to build a more

disaster-resistant community in the event of a man-made disaster.

For more information regarding this exercise, please contact Hui-Shan L. Walker, Deputy Coordinator Emergency Management, or Mark F. Junghans, Emergency Management Planner, at (757) 382-6504.

Amelia County Conducts Exercise

The Amelia County LEPC held a tabletop exercise on June 21, 2001. The exercise, which was funded through an HMEP grant, was designed to test the Amelia County Hazardous Materials Emergency Response Plan. The exercise focused on a variety of issues that included direction and control. communications, alert/notification, PIO/ media relations, site control, protective actions, shelter operations, decon, patient care and transport, resources and funding. The county had great participation which included Philip Vannoorbeeck, County Administrator; B. Kent Emerson, the Hazardous Materials Coordinator; representatives from all of the principal county departments; and the LEPC. Other exercise participants included the Virginia State Police, VDOT, VDEM, Old Dominion EMS Alliance (ODEMSA), Red Cross and RACES. Exercise facilitators included Steve De Lisi, VDEM Regional HAZMAT Officer; Jon Donnelly, Old Dominion EMS Alliance; Bob Buckman, Virginia Red Cross; and George Roarty, VDEM. Following the exercise, participants were introduced to



Lt. Rollison explains the Henrico County Hazardous Materials Team capabilities to Amelia County Sheriff Deputy Almarode.



Philip Vannoorbeeck, the Amelia County Administrator addresses participants before the exercise begins. B. Kent Emerson, the county HAZMAT Coordinator, is standing to his left.

Lt. Jerry Rollison and Firefighter Thomas Nuckols of the Henrico County Hazardous Materials Team who showed exercise participants their equipment and explained the team's capabilities.

Photos by the Amelia Bulletin Monitor



Henrico County Firefighter Thomas Nuckols shows Martha Pullen, the **Amelia County Director of Social** Services, various HAZMAT equipment.

HMEP Grant Funds Available

Grant funds are available again to LEPCs through the U.S. DOT Hazardous Materials Emergency Preparedness (HMEP) program to develop, improve, implement and/or exercise their hazardous materials emergency response plans.

As in previous years, the grants are awarded in the categories of plan compliance (plans that do not meet all the requirements of SARA Title III), plan development (initial plan development), plans improvement or enhancement (plans that meet the minimum requirements but need further refinement), and advanced exercises (e.g., functional, full-scale or regional exercises). Commodity flow studies are also eligible for funding under the program.

Final selections will be made based on the hazards, vulnerability, population at risk, amount requested and interest within the emergency planning district.

HMEP grants are reimbursable matching grants; that is, the applicant must obtain approval for the grant project, accomplish the work proposed and, upon completion, submit a claim for expenses within the approved amount of the grant. The recipient is also required to provide a 20 percent match that may be satisfied by either a hard match, in dollars, or a soft match in the form of donated time, facilities or services.

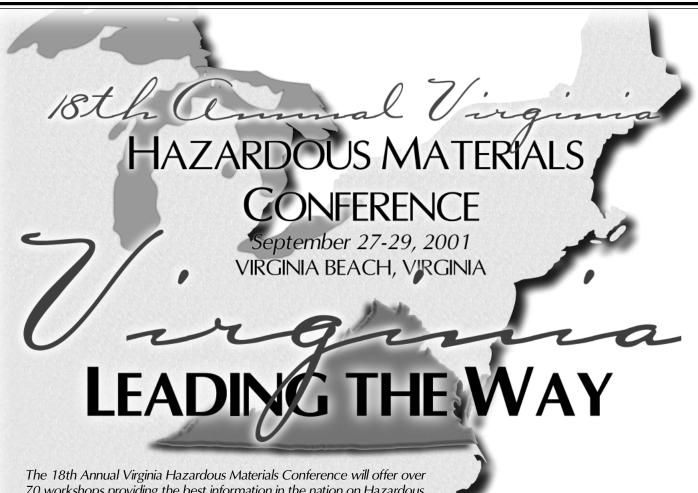
The match must be "new money" or "new donations" of time, facilities or other services. The terms "new money" and "new donations" mean money beyond what has been previously budgeted or donations in addition to those in effect before the grant is awarded. The matching dollars may not be money received from other federal resources or money/donations used to match other federal grants.

If interested in applying for a grant, contact George Roarty at (804) 897-6500 ext. 6574 or by email: groarty@vdem.state.va.us

Connections This newsletter is a vehicle to help LEPCs exchange information and keep abreast of state and follows.

initiatives. Tell us what you are doing.

We will publish stories, initiatives, projects, studies or issues that will be of interest to LEPCs and the Virginia hazardous materials response community. Please submit your comments or recommendations to George Roarty by: FAX: (804) 897-6576 or EMAIL: groarty@vdem.state.va.us



The 18th Annual Virginia Hazardous Materials Conference will offer over 70 workshops providing the best information in the nation on Hazardous Materials. The conference will be held at the Double Tree Hotel, Virginia Beach, Virginia. For hotel reservations call 1 (800) 222-TREE

To register for the conference, contact Conventions Plus at (757) 242-3692. You also can register online at www.vdem.state.va.us or www.convplus.com

Interested in an exhibit booth? Contact Steven De Lisi via email at <u>sdelisi@vdem.state.va.us</u>

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